

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A light source comprising:
a light emitting component which emits light when a voltage is applied, an intensity of the light varying across the light emitting component at the applied voltage;
and
a phosphor-containing material positioned to receive light emitted by the light emitting component, the phosphor-containing material converting at least a portion of the light to light of a different wavelength, the phosphor-containing material having a thickness which varies directly in proportion to the intensity of the light emitted by the light emitting component at the applied voltage, whereby the uniformity of color emission is improved as compared with a uniform thickness layer.
2. (Original) The light source of claim 1, wherein the light emitting component is selected from the group consisting of light emitting diodes and laser diodes.
3. (Original) The light source of claim 1, wherein the phosphor-containing material is formed from a material which includes:
a phosphor; and
a light-curable material which is cured by light emitted by the light emitting component.
4. (Original) The light source of claim 3, wherein the light emitting component emits light in at least one of the blue region and the UV region of the electromagnetic spectrum and the light-curable material is a blue or UV-curable material.

5. (Original) The light source of claim 4, wherein the blue or UV-curable material is a dental adhesive.

6. (Original) The light source of claim 3, wherein the phosphor is a yellow-emitting phosphor.

7. (Original) The light source of claim 1, further including:
a layer of a light transmissive material intermediate the light emitting component and the phosphor-containing material.

8. (Original) The light source of claim 3, wherein the light emitting component includes:

a die; and
a die attach material, the die attach material being formed from a material which is curable by light emitted by the light emitting component.

9. (Original) The light source of claim 2, wherein the phosphor-containing material surrounds at least a front and side edges of the light emitting component.

10. (Currently Amended) A light source comprising:
a light emitting component which emits light when a voltage is applied, an intensity of the light varying across the light emitting component at the applied voltage;
and

a phosphor-containing material positioned to receive light emitted by the light emitting component and converting a portion of the light to light of a different wavelength, the phosphor-containing material having a thickness which varies directly in proportion to the light passing through the phosphor material at the applied voltage, the

thickness being greater in regions where the intensity of the light emitted by the light emitting component is higher and lesser in regions where the intensity of the light emitted by the light emitting component is lower.

11. (Original) The light source of claim 10, wherein the light emitting component is selected from the group consisting of light emitting diodes and laser diodes.

12. (Previously Amended) A light source comprising:

a light emitting component which emits light; and

a phosphor-containing material positioned to receive light emitted by the light emitting component and converting a portion of the light to light of a different wavelength, the phosphor-containing material having a thickness which is greater in regions where the intensity of the light emitted by the light emitting component is higher and lesser in regions where the intensity of the light emitted by the light emitting component is lower, the phosphor-containing material being formed from a material which includes:

a phosphor; and

a light-curable material, which is cured by light emitted by the light emitting component by forming a layer of a phosphor-containing light curable material over the light emitting component;

energizing the light emitting component for a sufficient period of time to cure a portion of the curable material; and

removing remaining uncured curable material.

13. (Original) The light source of claim 12, wherein the light emitting component emits light in at least one of the blue region and the UV region of the electromagnetic spectrum and the light-curable material is a blue or UV-curable material.

14. (Original) The light source of claim 12, wherein the blue or UV-curable material is a dental adhesive.

15. (Original) The light source of claim 12, wherein the phosphor is a yellow-emitting phosphor.

16. (Original) The light source of claim 10, further including:
a layer of a light transmissive material intermediate to the light emitting component and the phosphor-containing material.

17. (Original) The light source of claim 12, wherein the light emitting component includes:

a die; and
a die attach material, the die attach material being formed from a material which is curable by light emitted by the light emitting component.

23. (Previously Presented) A light source with improved color distribution comprising:

a light emitting component which emits light; and
a phosphor-containing material positioned to receive light emitted by the light emitting component and converting a portion of the light to light of a different wavelength, the phosphor-containing material having a thickness which is greater in regions where the intensity of the light emitted by the light emitting component is higher and lesser in regions where the intensity of the light emitted by the light emitting component is lower, the phosphor containing layer being formed by a method which comprises:

forming a layer of a phosphor-containing curable material over the
light emitting component;

energizing the light emitting component for a sufficient period of
time to cure a portion of the curable material; and
removing remaining uncured curable material.